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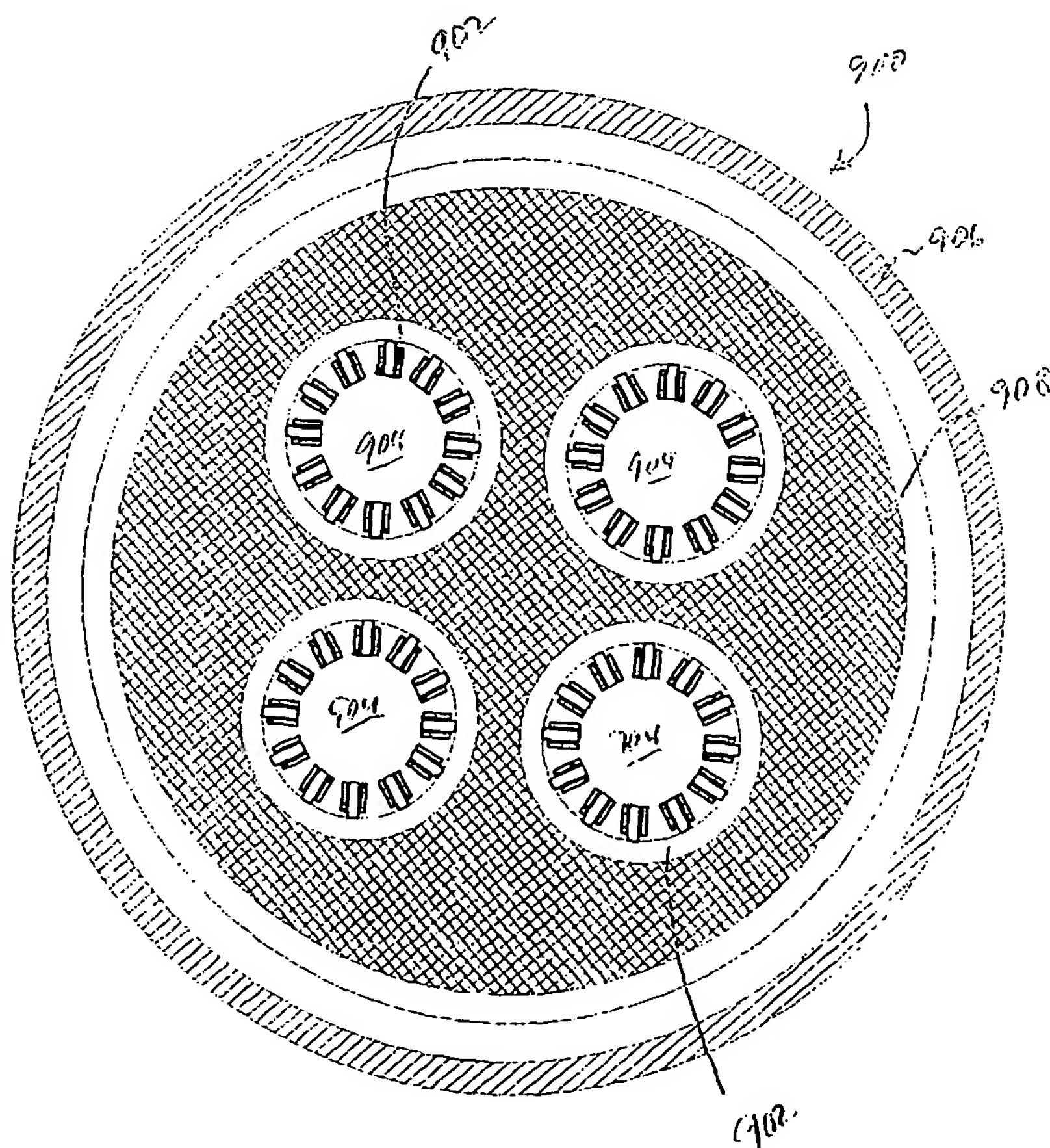
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(54) Title: SUPERCONDUCTING LOOP, SADDLE AND BIRDCAGE MRI COILS COMPRISING BUILT-IN CAPACITORS



(57) Abstract: New MRI coil and resonators are disclosed based solely on superconducting inductive element and built-in capacitive elements as well as hybrid superconducting-metal inductive and capacitive elements having superior SNR. Single and multiple small animal MRI imaging units are also disclosed including one or more resonators of this invention surrounding one or more small animal cavities. Methods for making and using the MRI coils and/or arrays are also disclosed.

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